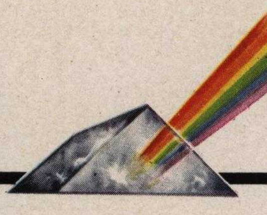
TO INCREASE **PRODUCTION...**

PLAN before you PAINT your plant!

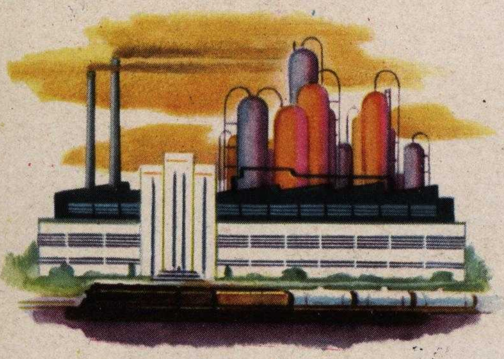
with VALDURA DIAL-A-TONE Color Selector



What is Color?

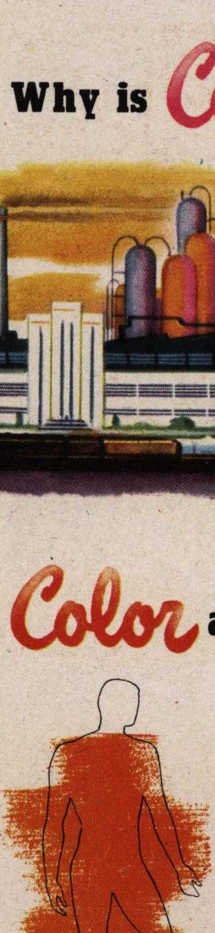
Color theories vary, but science agrees on the three basic factors which are essential for color to be visible: (1) a source of light, (2) a physical object which wholly or partially reflects this light, and (3) the resulting sensation upon the retina of the human eye. That light contains all the colors is proved easily by projecting a beam of white light through a prism. The *distinction* between these colors is purely a physiological reaction—the stimulation of the retina and its attached nervous mechanisms. Physically, colors themselves possess three distinct qualities: *hue*, the quality which enables us to describe a color as red or green; *purity*, the degree to which *white* has been mixed with it . . . enabling us to speak of a color as pale or deep, and *brilliance*, or the *luminosity* of the color—enabling us to designate a color as light or dark.

Why is Color important in your plant?



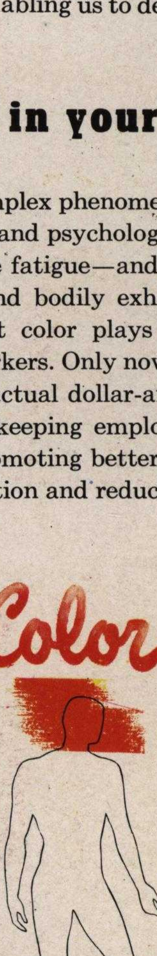
Color is a complex phenomenon capable of producing both physiological and psychological reactions. Color is directly related to eye fatigue—and eye fatigue is directly related to nervous and bodily exhaustion. Equally important is the part that color plays in stimulating or depressing industrial workers. Only now, however, has industry begun to learn the actual dollar-and-cents value of color . . . its vital role in keeping employees happier, increasing their efficiency, promoting better working conditions, obtaining their cooperation and reducing accidents and absenteeism.

Color affects the body



Because color is a co-worker of light, color affects visibility. Properly used, color can prevent eye-strain. The human eye . . . a delicate and complex mechanism . . . tires easily. Glare, constant shifts of vision, extreme contrasts all tax the eye. Headaches, nervous tension, digestive disturbances, fatigue are the inevitable result. Eye-fatigue spreads over the entire body, reducing the worker's efficiency.

Color affects the mind



Through natural association, colors have come to possess psychological significance. Red is spoken of as a "warm" color, blue a "cold" color. Because of these mental associations, colors can stimulate or depress. Color can play visual tricks . . . make rooms appear larger or smaller . . . lower or raise ceilings . . . make objects appear to stand out or recede.

Litho in U. S. A. Copyright by American Marietta Co., 1948

How Color insures...

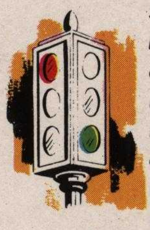
more efficiency

Correct use of color increases efficiency in production by improving visibility . . . by eliminating eye-strain and consequent fatigue. Color can focus the worker's attention on the task before him . . . help him perform that task with greater ease and speed.

greater safety

Colors are employed widely in industry as safety symbols . . . to mark off traffic lanes, warn of overhead cranes and conveyors, call attention to moving parts, identify switches and levers. By reducing accident hazards, color saves thousands of dollars.

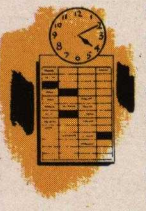
easier identification



Street markings, traffic lights, railroad crossings are all examples of identification by color. In the modern plant, color makes for instant identification of machine parts and danger zones. It can be used to identify where noise makes whistles and horns inadequate.

How Color reduces...

absenteeism



Cheerful, pleasant, harmonious colors that provide restful backgrounds cut down worker's absences. Dull, drab colors encourage mental depression and absences. Functional colors . . . colors that help workers do a better, speedier job . . . bolster morale, encourage pride of workmanship.

danger hazards

Color reduces danger hazards by minimizing eye fatigue and by clearly signalling warnings. Bright colors shout for attention, keep workers mentally alert to the hazards of traffic and moving equipment. Color is the least expensive safety device.

work fatigue

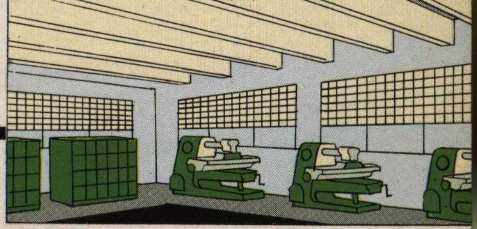
Color eliminates work fatigue by reducing glare, cutting down overly-strong contrasts and by providing restful surfaces for the eyes. Beyond protecting workers' eyes and thus preventing tiring effects, colors can contribute to higher morale.

Put Color to work for you...

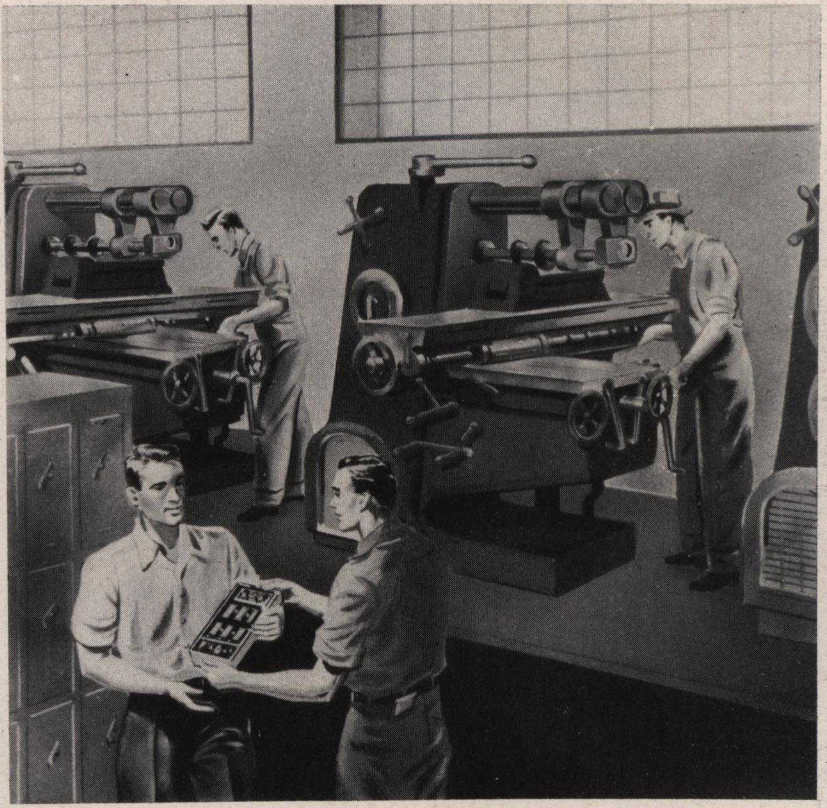
Color, then, is something more than a trick with a prism . . . or the plaything of an interior decorator. It *belongs* in the factory as much as it does in the home . . . performing a multitude of valuable services that range from eye-protection to the health, happiness and productivity of workers.

On floors, on walls, on ceilings, on machinery, in traffic lanes, in rest rooms and cafeterias, color affects every person . . . beneficially or negatively, depending on how it is used. It can increase output, better employee relations, heighten plant morale, insure attendance, lower accident rates. Its absence or misuse can have precisely the opposite effect. In the pages following, you will see specific examples of correct color application . . . further illustrations of the jobs color can do . . . and, most important, the main factors that enter into wise color selection. With the help of this book, *you* can avoid the common color errors and give full recognition to *your* particular color objectives.

You can PLAN before you PAINT.



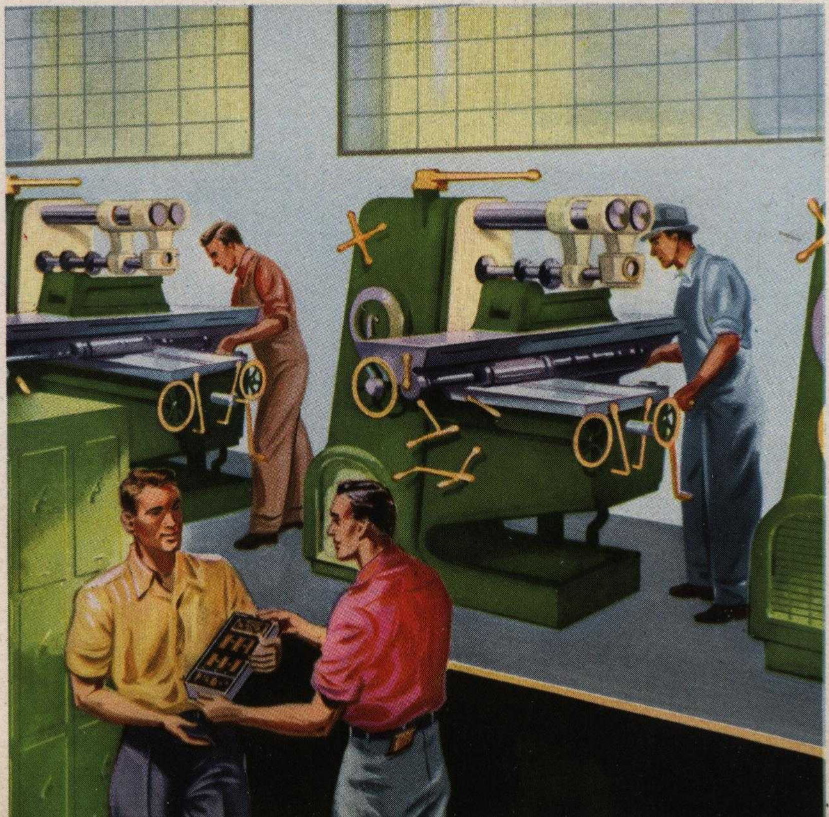
Where would You rather work?



Before

the application of color

In monotonous grays, the floors, walls, ceiling and machinery of this section of a plant blend into one dull, drab, cheerless area . . . where strained eyes and tired bodies invite accidents . . . where dark surfaces waste light through absorption . . . where morale is bound to be low . . . and where absenteeism and dissatisfied employees should be no surprise to management.



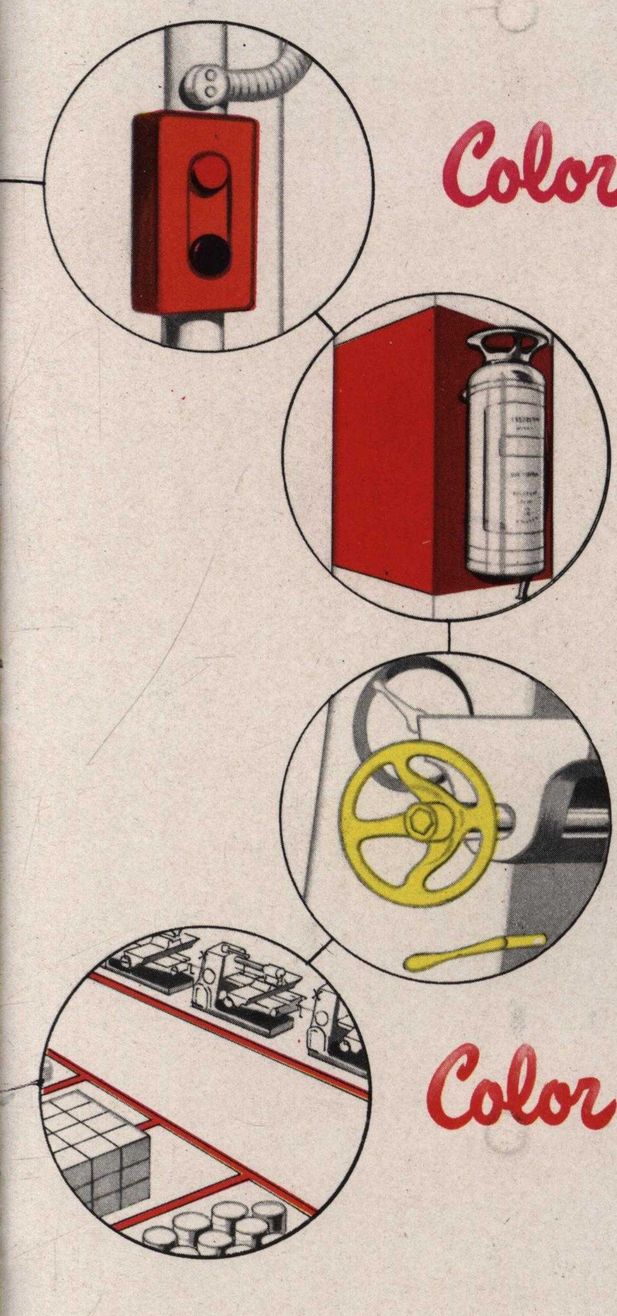
After

the application of color

In bright, cheerful, vision-aiding color, the same section of a plant becomes a warm, friendly place to work . . . where visibility is at its peak . . . where light is used thriftily . . . where productivity is high . . . where morale is excellent . . . where accidents rarely happen . . . and where interested, stimulated employees present no problems to management.

You can profit from the proper use of Color

To expect industrial workers to operate at peak efficiency and to work for hours at a stretch with a minimum of fatigue in a plant where color is entirely lacking is to expect the impossible. Modern management has recognized that color bears directly upon productive efficiency . . . and consequently upon profits. It is obvious that the plant which offers its employees better working conditions . . . which makes it *easier* and *safer* for them to work at their tasks . . . will be a more *efficient* plant. The reduction of absenteeism and accidents and the increase in production translate themselves into higher earnings. Color insures fewer costly "rejects." Color attracts better workmen. Color reduces employee turnover. Each of these advantages is an important profit factor.



Color can flash danger warnings

Colors reduce costly, production-crippling accidents by identifying danger hazards with bright, easily-noticed colors. Orange is an excellent "caution" color.

Color can locate vital equipment

First-aid kits, fire-fighting apparatus and other vital equipment are readily identified in emergencies by color. Green (for safety) points out first-aid locations; red locates fire protection equipment.

Color can identify machine parts

Color can be used not only to separate the machine from its setting, but also to mark its moving parts and to distinguish the material being worked on from the machine itself. Contrasting colors frequently are used.

Color can direct plant traffic

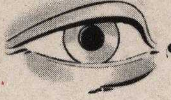
Color in the form of painted aisles, bounded by vivid stripes, can keep lift trucks, movable bins and other mobile equipment in safe traffic lanes. Bright colors on trucks warn workers of their approach.

Key your colors to PLANT EXPOSURE

Make the most of your best source of light . . . the daylight that streams into your plant. Whether your windows face north, east, south or west, the proper interior paint colors will improve, diffuse and intensify this natural light. The chart at the right will help you select the recommended Valdura Dial-a-Tone colors for your particular plant exposure. Listed beside the direction of your major light source, you will find scientifically selected combinations of colors for dados, walls and ceilings. These combinations were selected to provide for differences in plant size and structure, interior lighting, types of operations and machinery. Each of these color plans has been tried, tested and proved in actual use.

See Page 11 for colors indicated in chart — also for additional colors.

EXPOSURE	DADO	WALL	CEILING
SOUTH	319	6	F
SOUTH	319	5	E
SOUTH	302	5	E
SOUTH	304	4	WHITE
EAST	304	1	D
EAST	302	6	WHITE
EAST	302	5	WHITE
EAST	302	4	D
WEST	302	7	G
WEST	304	4	D
WEST	305	4	WHITE
WEST	305	4	A
NORTH	320	2	WHITE
NORTH	320	1	WHITE
NORTH	303	2	WHITE
NORTH	305	2	A



Preview your Plant

Valdura's Dial-a-Tone system of pre-viewing color combinations takes the guesswork out of color selection. By "dialing" different colors, *you* can actually see in advance how Valdura paints will look in your plant. Try all the color combinations suited to your light source on the Dial-a-Tone. Choose the combination which will give you the most satisfactory performance under the special conditions which exist in your plant.

Additional factors governing color selection

Temperature—The fatiguing and distracting effects of heat or cold on workers can be reduced by the colors used on walls and ceilings. Warm colors in cool rooms seem to lessen the chill. And, conversely, cool colors used in rooms where high temperatures are unavoidable will make the heat feel less oppressive.

Light Conditions—In addition to light from wall windows, all other light sources should be taken into consideration. Skylights and monitor windows, overhead and direct work lights whether incandescent or fluorescent will affect the light-reflecting qualities of given color combinations. Take the Dial-a-Tone out into your plant . . . test the colors under actual working conditions.

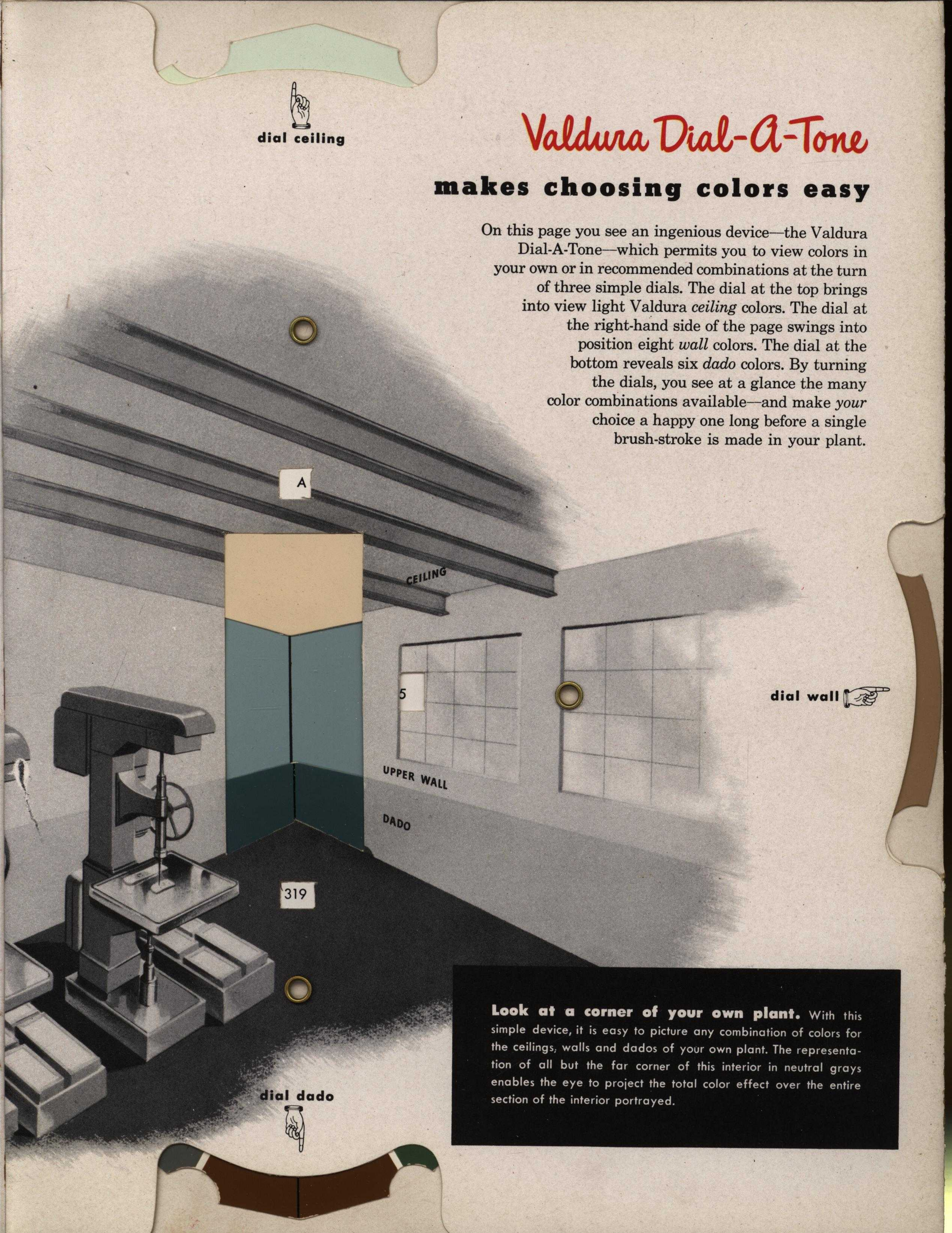
Ceiling Heights—The higher the ceiling, the lighter the color must be for efficient reflection. Certain colors can also change the height of ceilings, making them seem higher or lower. By taking full advantage of these helpful optical illusions, plant interiors can be made to appear roomier, more comfortable.

Surface Areas—Wall or ceiling areas also change the color and light-reflecting properties of paint. Colors which in small areas are practical and desirable may become, on larger surfaces, oppressive and distracting. Color can also create the illusion of increasing or decreasing the size of a room. Use color to aid you in creating desirable dimensional effects.

Valdura Dial-A-Tone

makes choosing colors easy

On this page you see an ingenious device—the Valdura Dial-A-Tone—which permits you to view colors in your own or in recommended combinations at the turn of three simple dials. The dial at the top brings into view light Valdura *ceiling* colors. The dial at the right-hand side of the page swings into position eight *wall* colors. The dial at the bottom reveals six *dado* colors. By turning the dials, you see at a glance the many color combinations available—and make *your* choice a happy one long before a single brush-stroke is made in your plant.



Look at a corner of your own plant. With this simple device, it is easy to picture any combination of colors for the ceilings, walls and dados of your own plant. The representation of all but the far corner of this interior in neutral grays enables the eye to project the total color effect over the entire section of the interior portrayed.

QUALITY of paint is as vital as Color

It is not enough merely to understand and appreciate the role of color. As important as the colors you choose is the *quality* of the paint you choose. Careful planning of colors for maximum light value, for reduction of eye-strain, for safety and for employee morale can be nullified by failing to specify paints of *known, tested* quality.

The red streak of a cheap paint is as red as that of a top quality paint. How, then, to distinguish *good* paint from *poor* . . . to get your rightful gallon of protection from every gallon you pay for? . . . the answer is in specifying paint with an established reputation for economy and durability—in choosing paints, not by their colors or their convenient presence, but by examining their record of performance in industrial use, by their fame in the field, by the integrity of their maker.

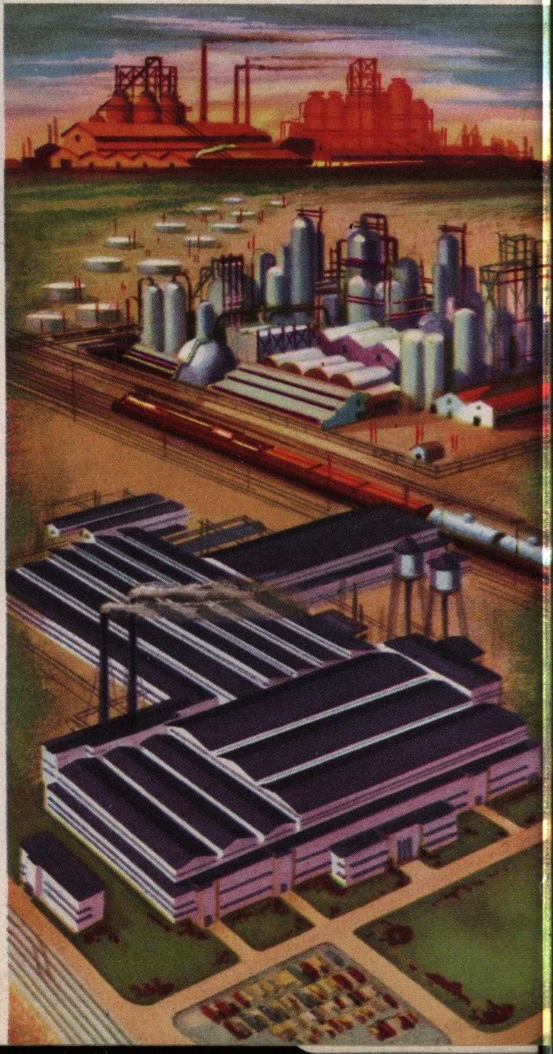
It is precisely on their record of past performance, their familiarity in maintenance engineering, and on the pioneering fame of their maker that Valdura Maintenance Paints today enjoy such an outstanding position.

VALDURA heavy-duty maintenance paints have been formulated specifically for industrial use

Valdura Maintenance Paints are the result of long and exhaustive research . . . in and out of laboratories . . . to perfect heavy-duty paints whose durability, adherence, hiding properties, spreading qualities, fume-resistance and color fastness would have no equal.

In field test after field test, Valdura Paints proved themselves . . . on metal and wood, on concrete and brick, on new and old plaster. Subjected to gruelling punishment in the laboratories and tested outdoors under the boiling suns of summer and the arctic blasts of winter, Valdura Paints come out with flying colors . . . ready for the severest tests of service industrial use could demand.

Requiring no extra special surface preparation, and amazingly easy to apply, Valdura Paints have represented . . . for more than a generation . . . the finest, the most economical and the most versatile line of industrial maintenance paints on the market. You can choose them with confidence.



Laboratory Tests

guard Valdura quality

Continuous laboratory research, conducted by men whose knowledge of paint comes from years of experience, assures you of unvarying Valdura quality. Modern paint-making facilities, plus raw materials delivered to rigid specifications of quality, are further assurances that Valdura Paints will provide you with the dependability that has earned them a national reputation and the loyalty of thousands of master painters. You take no chances when your painting contract reads "Valdura" . . . the name alone guarantees your complete satisfaction with performance.

Valdura maintenance paints possess

toughness, elasticity and durability

For sheer lasting qualities alone, Valdura Paints represent a smart economy. But their marathon performance in thousands of plants throughout the country is only a tribute to their ability to take punishment.

They may be sprayed or brushed on or dipped. Their spreading qualities provide more coverage per gallon. They're thrifty with maintenance budgets . . . and they save time and labor. They are the finishes which have earned, on *proved merit*, a foremost place among heavy-duty paints . . . the most frequent choice wherever the choice has rested on the greatest number of advantages at the lowest possible cost.

VALDURA'S INDUSTRIAL MAINTENANCE BOOKLETS

Valdura SPECIFICATION SERVICE

for manufacturers, plant superintendents, maintenance engineers, industrial architects

Although the basic principles of color selection are the same for every type of plant, the manufacturers of Valdura recognize that widely varying processes of manufacture demand *specialized* paints to meet highly particularized conditions. To assist such industries in specifying paints for their particular needs, Valdura has prepared a series of INDUSTRIAL MAINTENANCE BOOKLETS which chart the surfaces to be painted and the recommended finishes. These are offered free, and may be obtained by writing to the **Valdura Division, American-Marietta Company, 43 E. Ohio Street, Chicago, Illinois.**

TESTED ANSWERS to your painting problems

Here, in easy-to-follow charts, are the answers to every painting problem—recommendations compiled for major industries with specific reference to types of surfaces, technicalities of manufacturing and special conditions found in those industries.

Valdura primers and finish paints . . . meet every need

- **Valdura Improved Asphalt Paint**—Black, Red, Light Gray, Light Green and Dark Green
- **Valdura Asphalt Aluminum Paint**
- **High-Heat Resisting Aluminum Paint**
- **M&F Enamel**—all colors
- **Singlekote**—White and 7 colors
- **No-Odor Wall Paint**—White and 6 colors and in 3 finishes—Flat, Eggshell, and Gloss
- **Rubber Base Enamel**—10 colors
- **Darywhite Enamel**
- **Exterior Primer Undercoater**
- **Primer Sealer Undercoater**
- **No-Odor Wall Seal**
- **Enamelized Metal Primer,** Yellow
- **No Rust Primer**
- **Seal Coat E5594**
- **Metal Lead**
- **Valdura House Paint**—White only
- **Valdura Enamelized Paint**—White only
- **Mill White Paint**
- **Sarva Acid-Resisting Paint**
- **U-In-Tah Heat-Resisting Paint**
- **Marvex**
- **Quick-Dry**
- **Moist Bond Enamel** and its 2 Primers
- **Spar Varnish**
- **Floor Varnish**
- **Zone Marking Paints**
- **Defense Grays and White**
- **Asphalt Aluminum Roof Coating**
- **High Heat Gray**
- **Asgum Liquid and Plastic**
- **Roofdura Liquid and Plastic**
- **No. 98 Aluminum Paint**
- **Esstee Bituminous Paint**
- **No-Odor No. 66 Thinner**
- **Rubber Enamel Thinner**
- **Heavy-Duty White Enamel**
- **Brilliant White Creamery Enamel**
- **V-A Metal Primer**
- **Asgum Resaturant**

Valdura *Singlekote* Colors

CEILINGS and WALLS

① GOLDEN TAN Reflectance—25.2%	**② FLAME YELLOW** Reflectance—40.2%	**③ PRAIRIE GREEN** Reflectance—39.2%	**④ SEAFOAM GREEN** Reflectance—43%
1 part Golden Tan—2 parts white Reflectance—41.4%	1 part Flame Yellow—2 parts white Reflectance—55.2%	1 part Prairie Green—2 parts white Reflectance—54.6%	1 part Seafoam Green—2 parts white Reflectance—58.7%
Ⓐ 1 part Golden Tan—8 parts white Reflectance—52.8%	Ⓑ 1 part Flame Yellow—8 parts white Reflectance—66.2%	Ⓒ 1 part Prairie Green—8 parts white Reflectance—65.8%	Ⓓ 1 part Seafoam Green—8 parts white Reflectance—66.4%
⑤ MOUNTAIN BLUE Reflectance—51.2%	**⑥ VALLEY BLUE** Reflectance—52%	**⑦ HAZE GRAY** Reflectance—64.7%	
1 part Mountain Blue—2 parts white Reflectance—66%	1 part Valley Blue—2 parts white Reflectance—66%	1 part Haze Gray—2 parts white Reflectance—71.2%	**and snow white** Reflectance 86%
Ⓔ 1 part Mountain Blue—8 parts white Reflectance—74.8%	Ⓕ 1 part Valley Blue—8 parts white Reflectance—73%	Ⓖ 1 part Haze Gray—8 parts white Reflectance—77.2%	

DADOES

VALDURA M & F ENAMELS	**302 BATTLESHIP GRAY**	**320 INDIAN RED**	**305 TAUPE**
	304 SAGE GREEN	**303 LIGHT BROWN**	**319 LIGHT BLUE**

Valdura TODAY'S LEADER IN MAINTENANCE PAINTS
and the first of the eleven paint divisions comprising
THE AMERICAN-MARIETTA COMPANY

Valdura . . . an old and honored name in maintenance paints . . . was the first of eleven divisions to fly the American-Marietta banner . . . the first famous name in a roster which today includes many of the fine old names in paint-making. Through American-Marietta's centrally coordinated research and exchange of information, Valdura products have been improved constantly. Through American-Marietta's market research activities, centralized purchasing of raw materials and substantial investments in plant modernization, Valdura has increased production and reduced costs. Today, Valdura products are known and sold internationally . . . the finest maintenance paints obtainable.

VALDURA
PAINTS THAT ENDURE

VALDURA
Heavy-duty maintenance paints division of
AMERICAN-MARIETTA COMPANY
43 East Ohio Street
Chicago 11, Illinois

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